

REMARKS

In response to the requirement for restriction between the inventions of Groups I and II, Applicants elect the apparatus invention of Group I. Claims 1-9 and 19 have been found by the Examiner to be drawn to the elected invention of a power plant apparatus.

In view of the Applicants' election of the apparatus claims of Group I, the Examiner has required the Applicants to elect one of the alternative plant embodiments. The last sentence of paragraph [0037] of the specification describes the position of a by-pass 10 on the intake ducts side. This feature is included in claim 2, but the Examiner notes that the invention of claim 2 is not illustrated in the drawings. Applicants provisionally elect the species of Fig. 1. Claims 1 and 3-9 are readable on the elected species of Fig. 1. Claim 1 is generic to species claims 3-9.

Applicants request that the requirement for rewriting claims 10-18 be deferred pending a final determination on the requirement for restriction and election.

In response to the rejection of claims 1-6 and 8-18 under 35 U.S.C. §112, second paragraph, as being indefinite, Applicants have amended claims 1 and 2 to replace the word "by-pass" with the word "additional". It is submitted that this is an accurate description of the apparatus formerly referred to as "by-pass duct".

Claims 8 and 9 are canceled.

Claims 10-18 are dependent, either directly or indirectly, from claim 1. To overcome the Examiner's objection, claim 10 has been rewritten as a process claim and the reference to claim 1 has been deleted. As amended, it is submitted that claims 10-18 are now definite.

Claim 4 was additionally rejected under 35 U.S.C. §112, first and second paragraphs. Claim 4 has been amended to describe the low voltage drives with sufficient description to enable a person having ordinary skill in this art to understand the term "low voltage drives". The description in paragraph [0048] of the specification clearly explains what is meant by "low voltage drives". Nevertheless, Applicants have amended claim 4 to refer to an electrical device.

The Examiner has rejected claims 1, 3/1, 7-9 and 19 under 35 U.S.C. §102(b) as being anticipated by Mandrin. Applicants' invention includes a first booster stage which reduces the pressure losses over the whole intake duct and increases the intake pressure for the compressor, and thus increases the inflow air mass flow. By means of the second booster stage on the outlet side of the waste heat boiler, the pressure loss over the exhaust gas system is reduced, or the expansion final pressure of the turbine is lowered. Both of these features produce an increase in the power produced by the plant. The Examiner points out that Mandrin's Figure 2 shows a compressor 23a, turbine 23c, the compression portion of unit 20 (first booster), unit 26 (second booster), and waste heat recovery boiler 24 located between the turbine and second booster, as specified in claims 7 and 19. The Examiner takes the position that the compression portion of the unit 20 corresponds to Applicants' first booster and the unit 26, which is the compressor stage, corresponds to the second booster, and the waste heat recovery boiler 24 is located between the turbine 23a, 23c and the second booster 26. The compressor section of the gas generator 20 does not correspond to Applicants' booster section, which requires only a fan, while Mandrin discloses the use of a compressor. Fig. 2 of Mandrin does not disclose Applicants'

apparatus as claimed, and accordingly claims 1, 3, 7 and 19 are patentable over the cited prior art.

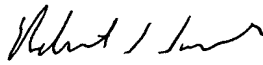
The Examiner refers to Fig. 6 of Boudigues, including compressors 30 and 34, turbines 27, 31 and 35, elements 52 and 28 (first and second boosters), and bypass duct 50. The recompressor 28 cannot be considered as a second booster stage, since the aim is to compress the gases, not to increase the mass flow. To the pressure of the compressed gases, the expansion final pressure of the turbine at the entrance of the compressor would never be lowered but rather, depending on the pressure to be achieved by the compressor, increased. Of course, no power augmentation can be achieved by a compressor since the compression would necessarily cost a lot of energy extracted from the final power output of the engine. Thus, no advantages of the present invention are disclosed in Boudigues, nor is there any teaching of Applicants' combination which achieves a more efficient operation. It is presumed that the reference to Boudigues applies with respect to claims 8 and 9, which have now been canceled.

In view of this response to the Office Action which addresses all of the issues raised by the Examiner, it is submitted that this application is in condition for allowance, and a favorable action is respectfully requested.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By: 
Robert S. Swecker
Registration No. 19,885

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

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Mark-up of Claims 1-4 and 10

1. (Twice Amended) A flow machine comprising:
a compressor, said compressor having an intake duct;
at least one turbine;
an exhaust duct connected to the at least one turbine directly or through intermediate elements;
a first booster stage arranged in the intake duct of the compressor; and
a second booster stage arranged in the exhaust gas duct, or in [a bypass] an additional duct of the exhaust duct.

~~2.~~ (Twice Amended) A flow machine comprising:
a compressor, said compressor having an intake duct and [a bypass] an additional duct to the intake duct;
at least one turbine;
an exhaust duct connected to the at least one turbine directly or through intermediate elements;
a first booster stage arranged in the [bypass] additional duct to the intake duct; and
a second booster stage arranged in the exhaust gas duct, or in [a bypass] an additional duct of the exhaust gas duct.

3. (Twice Amended) The flow machine according to claim 1 [or claim 2],
wherein at least one of the first booster stage and the second booster stage comprises one or

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more booster elements with fans, the booster elements with fans being arranged in parallel or series.

4. (Twice amended) The flow machine according to claim 3, wherein the booster elements have electrical drives which are designed as low voltage drives.

~~10.~~ (Twice Amended) A process for the operation of a flow machine [according to claim 1,] having a compressor, said compressor having an intake duct; at least one turbine; an exhaust duct connected to the at least one turbine directly or through intermediate elements, a first booster stage in the intake duct to the compressor, a second booster stage arranged in the exhaust duct, or in an additional duct of the exhaust duct; the method comprising: operating [wherein] the first booster stage and the second booster stage [are operated], individually or in combination, in dependence on specific operating conditions.